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Service Letter

Ariens Company
655 W. Ryan St.
Brillion, WI 54110
www.ariens.com

Product Family: Ariens and Gravely Products with Hydro-Gear Components

Subject: Hydro-Gear Warranty Claim Policy

Dealer Action: Policy Clarification

The purpose of this letter is to clarify warranty claim policy on Hydro-Gear hydrostatic drive components (pumps, wheel motors and transaxles) used on equipment produced and marketed by the Ariens Company.

Hydro-Gear's Warranty Statement

Hydro-Gear publishes a warranty statement that covers warranty repairs on hydrostatic components manufactured by Hydro-Gear. A copy of this statement is included with this service letter.

Dealers have two options to file a hydrostatic drive component repair warranty:

(1) Submit the warranty claim to the Ariens Company.
If a warranty claim is filed with Ariens Company, all component repair parts are to be purchased from Ariens Company. When deciding if a failure is warrantable, Ariens Company follows the Hydro-Gear warranty statement criteria to determine if a particular failure is covered.

(2) Submit the warranty claim directly to Hydro-Gear.
If a warranty claim is filed with Hydro-Gear, dealer must be a certified Hydro-Gear dealer and component repair parts are to be purchased from their Authorized Hydro-Gear Central Service Distributor.

Warranty Periods

Hydro-Gear hydrostatic components on Ariens and Gravely machines have the same warranty period as the machine. If the Hydro-Gear warranty period is expired and the Ariens or Gravely warranty period is valid, dealers are to only file the warranty claim to the Ariens Company.

Repair or Replace?

Hydrostatic drive components are to be repaired rather than replaced. The specific reason for a component's failure is to be determined and the most economical repair chosen. Typically repairing the hydrostatic component instead of the entire unit is the most economical option.

See three examples of possible component warranty situations:

1) The splines on an input pulley and input shaft of a transaxle are found to be worn and the failure is determined to be warrantable.
Action: The dealer replaces the pulley and input shaft of the transaxle; file warranty for the parts and labor.

2) *An oil leak is discovered because of a faulty axle seal on a transaxle and the failure is determined to be warrantable.*
Action: The dealer replaces the seal; file warranty for parts and labor.

3) *A transaxle is found to have low power and the machine is within the warranty period.*
Action: The dealer inspects the transaxle and determines which specific components are causing the low power. This inspection may include disassembling the transaxle. Once the components are indentified the dealer can determine if they are covered under warranty.
If the cost of repair parts plus labor is less than 60% of the total price of replacing the transaxle, the dealer is to repair the transaxle.
If the cost of repair parts plus labor is greater than 60% of the total cost of replacing the transaxle, the dealer is to replace the transaxle.

Troubleshooting

Ariens Company inspects every major Hydro-Gear component that is replaced under warranty. In some cases, returned components are not faulty.
Dealers can prevent non-faulty returned components by inspecting additional external causes of the failure. Possible examples include: a slipping ground drive belt, poor neutral adjustment or a frozen ground drive idler.
Included with this service letter is a checklist developed and used by Ariens Factory Service Schools to determine ground drive failures. Use this information during inspections to assist in finding root causes that may otherwise be overlooked.

Replacing a Complete Pump, Wheel Motor, or Transaxle

If a dealer chooses to replace a complete hydrostatic component and file warranty, the Ariens Company will notify the dealer to return the component and will send a UPS call tag.
It is recommended dealers re-use the replacement component packaging when shipping the original component to Ariens. The return component will be torn down and examined. The claim will be denied if the failure was not warrantable, no defect is found, or the component could have been economically repaired in the field.

Pre-Approving Warranty Claims

The Ariens Company requires the specific reason for the failure to be identified before a pre-approval request is considered. Ariens is unable to offer pre-approval of a complete hydrostatic component replacement under warranty based on a description of poor performance.
For 5400-Series transaxles, all complete transaxle replacements must be pre-approved for the warranty to be processed.

Model and Serial Numbers

All warranty claims must contain Hydro-Gear's model and serial number from the component for the claim to be processed. Hydro-Gear model and serial numbers appear on a decal on the component.
Example: A transaxle model number is ZM-GEEE-5LEF-2MLX. A serial number is: 2206D40050. These numbers must appear on any warranty claim.

Water-Contaminated Oil

In some cases, dealers may find a transaxle has poor performance because the oil in the transaxle is contaminated with water. The end user typically complains the transaxle performance worsens as the transaxle warms up. To inspect possible water-contaminated oil, examine the oil in the transaxle. Contaminated oil will be green or "pea soup" in appearance. In extreme cases, the oil will have a milky residue.
Water-contaminated oil is not a reason to replace a transaxle. In this case, the correct service procedure is to drain and replace the contaminated oil. If the transaxle does not have a removeable filter, it will be necessary to remove the transaxle from the mower to drain the oil. In extreme cases, it may be necessary to flush the transaxle twice.
If the dealer determines the reason for the water-contamination is warrantable, a claim may be processed for the flushing process. However, most water contaminated oil cases are caused by customer neglect.

Parts

Ariens Company stocks most common Hydro-Gear parts used for repairs on transaxles, pumps and wheel motors in equipment produced by Ariens. The link below will open a current cross reference list of Hydro-Gear to Ariens parts. This list will be updated as new parts are made available through Ariens Company. Ariens does not special order Hydro-Gear parts not found on this list, but these parts are available through Hydro-Gear and their distributors.

http://apache.ariens.com/manuals/00000035.pdf

Labor Flat Rates

The labor flat rates for Hydro-Gear transmission repairs are:

- Removal, internal repair, and replace: 3.5 hours
- Removal, diagnostic teardown, and replace: 2.0 hours
- Removal and replace: 1.5 Hours

*The labor rates for pump and wheel motors will vary by model.

Illustrated Parts Lists

For breakdowns of Hydro-Gear components used on equipment manufactured prior to 2009, use the Hydro-Gear Parts Manual available for download at the Dealer Extranet website. On newer equipment, internal transaxle parts will be shown in the equipment breakdowns. Authorized Hydro-Gear dealers also have access to parts information through Hydro-Gear's website.

Service Manuals

Hydro-Gear service manual PDFs are available for anyone to download at Hydro-Gear’s website: *http://www.hydro-gear.com/Main/service/service-repair-manuals.*

Flowmeter

Ariens recommends that dealers use a BDP flow meter to evaluate the BDP pumps used on many Ariens and Gravely products before filing any warranty claims on the complete pump assemblies. The BDP flow meter (Ariens p/n 59206200) allows the technician to isolate the BDP pump from the wheel motor and determine which component is at fault. Flow meter readings should be included in the warranty claims for pump assemblies. In the absence of a flow meter, only disassembly of the pumps and inspection of the internal components will determine the cause of the failure.

Hydro-Gear® Warranty Policies and Procedures

Limited Warranty

BLN-50225 Revision September, 2010

Hydro-Gear Limited Partnership (hereinafter referred to as "Hydro-Gear") warrants to the original equipment manufacturer (OEM), authorized distributor, or authorized servicing dealer purchasing a Hydro-Gear product or replacement parts (such purchaser is hereinafter referred to as "Buyer") that the product or replacement parts will be free from defects in material and workmanship at the time of shipment from Hydro-Gear, and will conform to such drawings and specifications as are applicable to the product or replacement parts under Hydro-Gear's sales agreement with Buyer.

The duration of this limited warranty is as set forth in the section below under the heading "WARRANTY PERIODS." During the applicable period of warranty, Hydro-Gear shall repair or replace at its option those products or their parts which are found by Hydro-Gear to be defective in material or workmanship at time of shipment, provided that Hydro-Gear or its authorized representative is first advised in writing of Buyer's contention of such defect (during such warranty period) and provided further, that the product or, if applicable, the replacement part in question is made available for inspection by Hydro-Gear or its authorized representative. To facilitate inspection, Hydro-Gear may request return of the product and/or part which Buyer contends to be defective. Product or parts failures or malfunctions which are not attributable to defects in material and/or workmanship, and which are not covered by the said warranty include, but are not limited to:

* Inadequate, contaminated, or improper fluid.
* Accident, abuse, improper maintenance, or neglect.
* Stripped keyways, or splines stripped or worn on external shaft end.
* Improper mounting of external pulleys, gears, couplings, etc.
* Improper electrical connection or power supply.
* Corrosion, or other damage, resulting from battery acid leakage.
* Operating above those speeds, weights limits, pressures, or temperatures recommended by Hydro-Gear.
* Use of the product in a manner or for a purpose not originally intended for by Hydro-Gear or failure to use in strict accordance with Hydro-Gear's written instructions.
* Repairs by personnel other than as authorized by Hydro-Gear.
* Transportation.
* Use of parts other than Genuine Hydro-Gear Parts or other parts authorized in writing by Hydro-Gear.
* Misdiagnosis of component failure.
* Maintenance items such as filters, oil, etc.

THE WARRANTIES SET FORTH HEREIN ARE IN LIEU OF AND TO THE EXCLUSION OF ALL OTHER WARRANTIES, WHETHER EXPRESS, IMPLIED, OR STATUTORY, INCLUDING BUT NOT BY WAY OF LIMITATION, WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

HYDRO-GEAR'S LIABILITY, WHETHER OF WARRANTY, NEGLIGENCE, OR OTHERWISE, IS LIMITED TO THE REPAIR OR REPLACEMENT AS HEREIN PROVIDED OR, AT HYDRO-GEAR'S SOLE OPTION, TO A REFUND OF THE PURCHASE PRICE. **THIS SHALL BE HYDRO-GEAR'S SOLE AND MAXIMUM LIABILITY AND UNDER NO CIRCUMSTANCES SHALL HYDRO-GEAR BE LIABLE FOR LIQUIDATED, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES.**

If Buyer grants warranty on Hydro-Gear products of greater scope than the warranties provided by Hydro-Gear, or extends any warranty period beyond the applicable period described in **"WARRANTY PERIODS,"** Buyer does so at its sole risk and expense and Buyer will indemnify and hold Hydro-Gear harmless from any claims of any party based on such greater warranty or period, and any expenses incurred in the defense of such claims. This warranty only applies to OEM's, authorized distributors, authorized servicing dealers, and by its terms does not extend to any person buying the product from such OEM, authorized distributor, or authorized servicing dealer, for personal, family, or household use. If Buyer makes available the benefits of this warranty to its customer, and if the Magnuson-Moss Warranty Improvement Act (Pub. L. 93-637) or similar state laws should apply, Buyer assumes all responsibility for compliance with such laws and any expenses incurred in the defense of any such claims, thereunder.

Warranty Periods

Note: Proof of purchase must be available if requested to assist in determining commencement of the warranty period. If not available upon request the Hydro-Gear Serial Number will determine the commencement of the warranty period.

A. REVIEWED TWO YEAR NONCOMMERCIAL* USAGE *(See Figure 1, Hydro-Gear Warranty Time Frames)*
The warranty period shall be limited to the earlier of:
(i) 24 consecutive months (2 years) from the date of first sale** of the product, or
(ii) 24 consecutive months (2 years) from the date of manufacture if proof of purchase is not available upon request, and is subject to a limitation of 48 consecutive months (4 years) from the date of manufacture.***

B. REVIEWED ONE YEAR COMMERCIAL USAGE *(See Figure 1, Hydro-Gear Warranty Time Frames)*
The warranty period shall be limited to the earlier of:
(i) 12 consecutive months (1 year) from the date of the first sale of the product, or
(ii) 90 days from the date of the first sale of the product on Rental applications; or
(iii) 12 consecutive months (1 year) from the date of manufacture if proof of purchase is not available upon request, and is subject to a limitation of 48 consecutive months (4 years) from the date of manufacture.***

C. REVIEWED TWO YEAR COMMERCIAL USAGE *(See Figure 1, Hydro-Gear Warranty Time Frames)*
The warranty period shall be limited to the earlier of:
(i) 24 consecutive months (2 years) from the date of the first sale of the product, or
(ii) 90 days from the date of the first sale of the product on Rental applications; or
(iii) 24 consecutive months (2 years) from the date of manufacture if proof of purchase is not available upon request, and is subject to a limitation of 48 consecutive months (4 years) from the date of manufacture.***

D. PRODUCTS REBUILT BY HYDRO-GEAR
If a product is rebuilt by Hydro-Gear during the original new product warranty period, warranty on the rebuilt item shall be as set forth herein and shall continue for the balance of the original warranty period.

E. HYDRO-GEAR REPLACEMENT PARTS
All parts shall be warranted for 90 days from the date of original shipment of the parts from Hydro-Gear.

F. HYDRO-GEAR REPLACEMENT UNITS
All replacement units shall be warranted for 180 days from the date of original shipment of the replacement units from Hydro-Gear.

* Noncommercial - any vehicle not reviewed for commercial use by Hydro-Gear.

** First sale - is considered the date a vehicle or replacement unit is first sold by Buyer.

*** 48 consecutive months (4 years) from the date of manufacture – Any warranty period listed herein will remain in effect for its entire duration on any sale of the product by Buyer occurring up to 48 consecutive months (4 years) from the date of manufacture by Hydro-Gear. Hydro-Gear will not reimburse Buyer on warranty claims pertaining to products sold by Buyer more than 48 consecutive months (4 years) from the date of manufacture by Hydro-Gear. In the latter case, any warranty offered by Buyer is at the sole risk and expense of Buyer. In such case, Buyer will indemnify and hold Hydro-Gear harmless from the claims of any party based on such warranty, and from any expenses incurred in the defense of such claims.

Transaxle: External Checklist

Ground Drive Belt

Belt Condition

- ☐ Glazed / Slipping
- ☐ Routing Correctly
- ☐ Poor Tension
- ☐ Frayed
- ☐ Wrong belt

Idler

Idler Condition

- ☐ Spring tension
- ☐ Belt Tension
- ☐ Idler Bearing
- ☐ Alignment

Idler Arm

Arm Condition

- ☐ Sized / Frozen in position
- ☐ Bent/ Misaligned

Dampeners

Dampeners Condition

- ☐ Loss of Compression
- ☐ Missing
- ☐ Wrong part

Linkage

Condition of Linkage

- ☐ Loose
- ☐ Out of Adjustment
- ☐ Bent
- ☐ Sloppy
- ☐ Worn

Model ☐

Serial ☐

Hours ☐

Parking Brake

Condition--Parking Brake

- ☐ Worn
- ☐ Broken
- ☐ Out of adjustment

Frame

Condition of the Frame

- ☐ Cracked
- ☐ Bent

Tires

Condition of the Tires

- ☐ Incorrect Tire
- ☐ Tire Pressure

Appearance

Condition of the Machine

- ☐ Debris / Overheating

Oil

Condition of oil

- ☐ Burnt / Old
- ☐ Water in oil / green
- ☐ Mystery Fluid

Filter

Condition of external filter

- ☐ Original filter
- ☐ Wrong part
- ☐ Loose / Leaking

Engine Rpm ☐

Transmission

Condition of Transmission Mount

- ☐ Loose Hardware
- ☐ Missing Hardware